

# JOURNAL SUPPLEMENT

Vol. 38, No. 10

OCTOBER, 1959

THE INSTITUTION OF PRODUCTION ENGINEERS, 10 CHESTERFIELD STREET, MAYFAIR, LONDON, W.1

## THE ANNUAL DINNER-1959

The Institution's Annual Dinner, 1959, will be held in the

**Dorchester Hotel, London**

on

**Thursday, 19th November, 1959**

Tickets, price £3 5s. 0d. each (excluding wines), may be ordered on the form overleaf. Owing to limited accommodation, it is not possible to have lady guests. Tickets and table places for members and gentlemen guests will be allocated in strict order of receipt of applications. Seating will be at round tables of 10 persons.

### PLEASE NOTE

No applications for tickets received after **Tuesday, 3rd November**, will be accepted.

## THE 1959 E. W. HANCOCK PAPER

Members are reminded that The 1959 E. W. Hancock Paper will be presented on **Monday, 12th October, 1959**, at **The University of Bristol**. The speaker will be **Mr. R. A. Banks**, Personnel Director, Imperial Chemical Industries Limited, the subject of the Paper being :

### "HUMAN RELATIONS IN INDUSTRY"

The Paper will be followed by open discussion, and the Chair will be occupied by **Mr. Harold Burke**, Vice-President of the Institution.

Admission to the meeting will be by ticket only, which may be obtained from : The Secretary, The Institution of Production Engineers, 10 Chesterfield Street, Mayfair, London, W.1.

## THE ANNUAL DINNER, 1959

FROM (Please use block letters)	Date received at I.Prod.E.
	Receipt sent:
	Ticket(s) sent:

**TO: THE SECRETARY,  
THE INSTITUTION OF PRODUCTION ENGINEERS,  
10 CHESTERFIELD STREET,  
LONDON, W.1.**

Please send me a ticket for myself and.....tickets for my guests whose names are given below:

Names of guests

Titles, honours and decorations

.....  
.....  
.....

.....  
.....  
.....

*(additional names may be entered on separate slip)*

If possible, I should like to sit at the same table as, or adjacent to, the following members:

.....

I enclose remittance for £ : : (..... ticket(s) a) at £3 5s. 0d. each).

**N.B.**—Cheques, etc., should be crossed and made payable to the Institution of Production Engineers.

## INTERNATIONAL CONGRESS OF SCIENTIFIC MANAGEMENT AUSTRALIA, 22nd February - 4th March, 1960

It is expected that between 1,600 and 2,000 delegates will attend the 12th International Congress of the International Committee of Scientific Management (CIOS), which is to take place in Australia early next year, and representatives from the 29 member countries of CIOS will include leaders of industry, commerce and Government.

The first part of the Congress will be held in **Sydney** from **22nd - 26th February, 1960**, and the second part in **Melbourne** from **20th February - 4th March, 1960**. During the intervening weekend, parties will visit the Snowy Mountains hydro-electric undertaking.

It is anticipated that a strong United Kingdom delegation will attend the Congress and arrangements are being made for charter flights to Australia. Further details may be obtained from Mr. B. W. Vigrass, Head of Regional and Overseas Department, British Institute of Management, 80 Fetter Lane, London, E.C.4.

**Members of The Institution of Production Engineers who will be attending the Congress are asked to advise the Secretary, who will also be present.**

## **SOUTH EASTERN REGION GRADUATE PRIZE**

The South Eastern Region Committee announce that they received four entries for the 1958-59 Competition, from the following Graduates:

G. S. Cheeswright; B. W. Jenney; D. B. Richardson; I. M. L. Ward.

The prize winner was I. M. L. Ward, who is Personal Assistant to the General Works Manager of Marconi's Wireless Telegraph Company Ltd.

The South Eastern Region Committee are again running a Competition on similar lines this year, the regulations being as follows:-

1. The Prize is known as the South Eastern Region Graduate Prize.
2. The Prize will be £25; in addition, a certificate will be presented as a permanent memento of the award.
3. All Graduates and Students of the South Eastern Region of the Institution may compete.
4. Papers may be submitted on any subject within the field of Production Engineering.
5. Application forms may be obtained from:-  
The Institution of Production Engineers, 10 Chesterfield Street, Mayfair, London, W.1.  
and should be completed and returned by 30th September, 1959.
6. Papers should not be less than 2,000 nor more than 6,000 words in length.
7. Although it is preferable that Papers are typewritten, they may be submitted in the candidate's own handwriting.
8. Completed Papers must be submitted by the 30th NOVEMBER, 1959, and should be sent to:-  
The Institution of Production Engineers, 10 Chesterfield Street, Mayfair, London, W.1, the envelope being marked "South Eastern Region Graduate Prize".
9. Papers submitted for the Prize will be assessed under the following headings:-
  - (i) Evidence given of the importance of the subject to production;
  - (ii) Content (technical or managerial), including originality of subject;
  - (iii) Planning (logical development of the subject);
  - (iv) Style;
  - (v) References, illustrations, charts, graphs, etc.
10. The Committee reserve the right to examine applicants orally in the subject of their Paper.
11. The Committee reserve the right not to make an award if they consider no Paper submitted is of the required standard.

## **SOUTH EASTERN REGION DINNER-DANCE**

The South Eastern Region will hold their Annual Dinner-Dance on **Friday, 27th November, 1959**, at the **Savoy Hotel, London**.

Tickets, price £2 10s. 0d. each, may be obtained from: Miss M. Miles, Room 741B, Marconi's Wireless Telegraph Company Ltd., Chelmsford, Essex.

## **BIRMINGHAM SECTION BUFFET-DANCE**

To open the season the Birmingham Section are holding a Grand Buffet-Dance, on **Saturday, 24th October, 1959**, at the **Grand Hotel, Birmingham**. Tickets (members, ladies and friends) price 24s. 0d. each, may be obtained from Mr. H. W. Lawton, Section Social Secretary, c/o Henry W. Lawton Ltd., Dudley Road East, Oldbury, Birmingham. Tel: BRO 2541 - 2.

## **SANDWICH COURSE IN EXECUTIVE DEVELOPMENT**

The Department of Commerce and Management of Sheffield College of Technology is to provide a Sandwich Course in Executive Development, commencing in **November, 1959**. The purpose is to provide for the young manager and potential manager a fully-integrated plan of executive development, by bringing together in one scheme both education for management within the College, and general and vocational managerial experience in his working environment. Only students already engaged in industry and individually sponsored by their employers will be accepted into the course.

Full particulars of the course may be obtained from: The Acting Head of the Department of Commerce and Management, College of Technology, 1 Melbourne Avenue, Sheffield, 10.

## **COURSE IN MATERIALS HANDLING**

A 30-week course of one afternoon per week on Materials Handling, based on The Institution of Production Engineers syllabus, has been arranged by the College of Technology, Birmingham.

Full particulars may be obtained on application to: Mr. T. B. Worth, M.I.Mech.E., M.I.Prod.E., Head of the Department of Production Engineering, College of Technology, Gosta Green, Birmingham, 4.

## **THE 1960 PRODUCTION EXHIBITION**

It is announced that the 1960 Production Exhibition will be held in the **National Hall, Olympia, London**, from **25th - 30th April, 1960**. A series of conferences with the title "Productivity, Men and Methods" will be held during the Exhibition.

Full particulars may be obtained from: The Organisers, The Production Exhibition, 11 Manchester Square, London, W.1.

# SECTION MEETINGS

Visitors Tickets may be obtained from Section Honorary Secretaries

## OCTOBER, 1959

### EASTERN REGION

**Ipswich and Colchester** 7.30 p.m. October 16th  
 Britannia Works Canteen, Davey Paxman & Co. Ltd., Colchester.  
 "The Application of Induction Heating in the Manufacture of Diesel Engines" by L. L. Bott, M.I.Prod.E.  
 Chairman's address.  
 Joint Meeting with the Colchester Engineering Society.

### EAST & WEST RIDINGS REGION

**Doncaster** 7 p.m. October 13th  
 Doncaster Technical College, Doncaster.  
 "Electronics as an Aid to Production" by O. S. Puckle, M.B.E., M.I.E.E.  
**Halifax & Huddersfield** 7 p.m. October 21st  
 Percival Whitley College of Further Education, Francis Street, Halifax.  
 "Productivity and Exports" by J. B. Scott, D.F.C., Associate.E.E.  
**Sheffield** 6.45 p.m. October 12th  
 Grand Hotel, Sheffield.  
 Annual Dinner.  
**Leeds** 7 p.m. October 12th  
 Hotel Metropole, King Street, Leeds, 1.  
 "Some Aspects of the Education of the Production Engineer of the Future" by F. W. Cooper, B.Sc., M.I.Mech.E., M.I.Prod.E.

### MIDLANDS REGION

**Birmingham** 7 p.m. October 21st  
 James Watt Memorial Institute.  
 "Production—The Chief Inspector's Point of View" by H. W. Mander, M.I.Prod.E.  
 7.30 p.m. October 24th  
 Grand Hotel, Birmingham.  
 Buffet Dance, Tickets 24s. 0d. each.  
**Birmingham Graduate** 7 p.m. October 13th  
 James Watt Memorial Institute, Birmingham.  
 "Heat Treatment Furnaces" by J. C. Harris.  
**Coventry Graduate** 7.15 p.m. October 6th  
 Craven Arms, High Street, Coventry.  
 "Concerning Gleason Methods and Machines."  
**Shrewsbury** 7.30 p.m. October 28th  
 Shrewsbury Technical College.  
 "Production in Western Germany" by A. C. Turner, G.I.Mech.E., A.M.I.Prod.E.  
**Wolverhampton** 7.15 p.m. October 7th  
 Wolverhampton & Staffs. Technical College.  
 "Spark Erosion as an Aid to Production" by P. Yallop.  
**Wolverhampton Graduate** Evening October 15th  
 Works Visit to S. J. Stanton & Sons, Bakers and Confectioners, Hednesford, Staffs.

### NORTHERN REGION

**Newcastle-upon-Tyne** 7 p.m. October 19th  
 Rutherford College of Technology, Northumberland Road, Newcastle-upon-Tyne.  
 "Tool Wear and Machinability" by Dr. E. M. Trent, Ph.D., M.Met.  
**Newcastle-upon-Tyne Graduate** 10 a.m. October 10th  
 Morning Visit to British Thomson-Houston Ltd., West Chirton, North Shields.

### NORTH MIDLANDS REGION

**Derby** 7 p.m. October 19th  
 Louis Room, St. James's Restaurant, St. James's Street, Derby.  
 "What's New in Casting" by A. Short, M.I.Prod.E., A.M.B.I.M., M.B.I.F.

**Leicester** 7.15 p.m. October 8th  
 Evening Visit to the Imperial Typewriter Co. Ltd., East Park Road, Leicester, followed by Lecture: "The Production Control System at the Imperial Typewriter Co." by B. S. Pears.  
**Loughborough College** 2 p.m. October 21st  
 Afternoon Visit to Ransome & Marles Ltd., Newark-on-Trent.  
**Lincoln** 7.30 p.m. October 29th  
 Ruston Club, Lincoln.  
 "Work Measurement and Its Uses for Management" by W. Hewett, A.M.I.Mech.E., F.I.I.A., M.Amer.S.M.E., M.I.Prod.E.  
**Nottingham** 7 p.m. October 7th  
 Reform Club, Victoria Street, Nottingham.  
 "The Uses of Plastics for Making Jigs, Tools and Moulds" by P. G. Pentz, B.Sc.  
**Peterborough** 7.30 p.m. October 14th  
 "Conference Room," Peterscourt, Peterborough.  
 "Forum" — Panel, Messrs. H. F. Adams, M.I.Prod.E.; S. J. Bellamy; J. C. Player; Myron W. Rhotem.

### NORTH WESTERN REGION

**Manchester** 7.15 p.m. October 26th  
 Reynold's Hall, Manchester College of Science & Technology, Sackville Street, Manchester.  
 "Applications of Hydro-Pneumatic Circuits" by J. M. Kenworthy.  
 Joint Meeting with the Graduate Section.  
**Preston** 7.30 p.m. October 14th  
 Bolton Municipal Technical College, Manchester Road, Bolton, Lancs.  
 "Recent Developments in Sintered Oxide Cutting Tools" by R. N. Cook, A.M.I.Mech.E., M.I.Prod.E.  
**Stoke-on-Trent** 7.30 p.m. October 12th  
 Grand Hotel, Hanley, Stoke-on-Trent.  
 "Further Developments in the Application of Sintered Oxides for Cutting Tools", illustrated by slides and sound film, by R. N. Cook, A.M.I.Mech.E., M.I.Prod.E.

### SCOTLAND REGION

**Dundee** 7.30 p.m. October 7th  
 Windmill Hotel, Arbroath.  
 "Numerical Control of Machine Tools" by Messrs. Brett and Tack.  
**Edinburgh** 7.30 p.m. October 14th  
 Northern British Hotel, Princes Street, Edinburgh.  
 "Nuclear Energy" by J. F. Fleming, A.M.I.Mech.E.  
**Glasgow** 7.30 p.m. October 15th  
 Institution of Engineers & Shipbuilders, 39 Elmbank Crescent, Glasgow, C.2.  
 "Multi-Stage Tooling for High Speed Production" by J. C. Galway.  
 Synopsis—The Design and Application of Multi-Stage Tooling in conjunction with High Speed Dieing Presses.

### SOUTH EASTERN REGION

**London** 7 p.m. October 22nd  
 Royal Commonwealth Society, Northumberland Avenue, Strand, W.C.2.  
 "Computers as Applied to Production Control" by B. L. J. Hart, A.I.Prod.E., A.M.B.I.M.  
**London Graduate** 2.30 p.m. October 1st  
 Half-day Visit to Associated Motor Cycles (Plumstead).  
**London Graduate** 7.15 p.m. October 13th  
 10 Chesterfield Street, Mayfair, W.1.  
 "Properties and Application of Modern Precision Grinding Wheels" by J. Manning, A.M.I.Mech.E., and R. Norton.  
 October 24th  
 Whole-day visit to the Norton Grinding Wheel Co. Ltd., Welwyn Garden City, Herts.  
 Lunch will be provided.



**Luton** 7.30 p.m. **October 22nd**  
North Herts Technical College, Letchworth, Herts.  
"The Management of Men" by R. R. Hopkins.

**Luton Graduate** 7.30 p.m. **October 13th**  
Small Assembly Hall, Town Hall, Luton.  
"Effective Production Control Records" by E. Read.

**South Essex** 7.30 p.m. **October 7th**  
Hoffman Manufacturing Co. Ltd., Social Centre, New Street, Chelmsford.  
"Heat Treatment of Steels — Methods and Troubles" by E. A. Goodchild.  
Preceded by a Visit to the Heat Treatment Department at 6.30 p.m.

#### **SOUTH WESTERN REGION**

**Western** 7 p.m. for 7.30 p.m. **October 29th**  
Berkeley Cafe, Bristol.  
Dinner and Dance, tickets 25s. 0d. each.

#### **WALES REGION**

**Cardiff** 7 p.m. **October 23rd**  
South Wales Institute of Engineers, Park Place, Cardiff.  
"The X-ray and Gamma-ray Inspection of Steel" by H. Webborn.  
Joint Meeting with the Swansea Section.

**Swansea** 7 p.m. **October 28th**  
Central Library, Swansea.  
"Mechanical Handling and Motion Study" by F. E. Rattlidge, A.M.I.Prod.E.

## **NOVEMBER, 1959**

#### **MIDLANDS REGION**

**Coventry Graduate** 7.45 p.m. **November 4th**  
Works Visit.

"A Modern Press Shop and its Layout"  
Coventry Radiator & Presswork Co. Ltd., Canley Works, Coventry.  
Rendezvous Main Entrance.

**Morning November 7th**  
Works Visit Messrs. Chance Bros. Glass.

#### **NORTH MIDLANDS REGION**

**Loughborough College** 7.30 p.m. **November 3rd**  
Room A.1, Schofield Building, College of Technology, Loughborough.  
Illustrated Lecture.

**Nottingham** 7 p.m. **November 4th**  
Reform Club, Victoria Club, Nottingham.  
"Adhesives in Engineering" by E. J. Catchpole, B.Sc., A.F.R.Ae.S., M.I.A.S.

#### **NORTHERN REGION**

**Newcastle-upon-Tyne** 6 p.m. **November 2nd**  
Neville Hall, Institute of Mining & Mechanical Engineers, Newcastle, 1.

"The Production, Fabrication, Properties and Uses of Some of the Newer Metals" by Dr. N. P. Inglis, Ph.D., M.Eng., M.I.Mech.E. (The 1958 Viscount Nuffield Paper).  
Joint meeting with the Institution of Mechanical Engineers.

#### **SCOTLAND REGION**

**Glasgow** 7.30 p.m. **November 5th**  
Institute of Engineers and Shipbuilders, 39 Elmbank Crescent, Glasgow, C.2.  
Open Discussion Night.

# **PRODUCTION APPOINTMENTS**

**BULLETIN No. 73**  
**OCTOBER 1959**

The last date for receiving material for insertion in the following month's bulletin is the 20th of each month, and cancellations cannot be accepted after this date. Correspondence should be addressed to: The Publications Department, The Institution of Production Engineers, 10 Chesterfield Street, Mayfair, London, W.1 (Telephone: GROsvenor 5254).

**RATES — Run-on, per appointment:** £4 4s. 0d. up to 100 words; £1 1s. 0d. for each additional 100 words or part thereof. Special rate for firms affiliated to the Institution, technical colleges and universities: £2 2s. 0d. per appointment up to 100 words, and 10s. 6d. for each additional 100 words or part thereof.

**Displayed:** £6 per single-column inch (column width  $3\frac{1}{4}$  in.). Special rate for firms affiliated to the Institution, technical colleges and universities: £5 10s. 0d. per single-column inch.

Advertisers are advised that better response is likely if, in addition to essential qualifications, the following information is given:

(a) Location of appointment; (b) Status in the organisation and scope of promotion; (c) Salary range and age range. Advertisers are asked to advise the Institution when appointments are filled. The Institution reserves the right to refuse or withdraw any announcement and also to make any alteration in the wording to ensure conformity with the Institution standards. Members interested in the following appointments should make application in accordance with the terms of notice. No correspondence can be undertaken by the Secretary other than the forwarding of replies to Box Nos.

**Senior Foreman.** Applications are invited for the post of Senior Foreman to take complete charge of the heavy machine shop in the new factory of an engineering Company in the North of England engaged in the manufacture of heavy machinery. Applicants must be experienced Foremen, with supervisory knowledge of planers, planomills, horizontal borers and the usual run of standard machine tools. This is a key position which provides ample scope for ultimate promotion to the position of Machine Shop Superintendent; it is superannuated and will be well remunerated. Please give full details of age, qualifications, experience, present salary, etc., to: Box No. 1878, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.

**Chief Workshop Planner** required for modern and developing Central Engineering Workshops in Nottingham. Applicants should have approved engineering background and comprehensive experience of modern planning and production control techniques with technical qualifications of Higher National Certificate or equivalent in Mechanical or Production Engineering with Electrical endorsement. Initial salary between £900 and £1,400 per annum. The post is permanent and superannuable. Applications giving age and full details of education, experience and qualifications should be sent to Area Staff Manager, N.C.B. E.M. Division, No. 6 Area, Bestwood, Notts., quoting S.V. No. 27(59) (I.Prod.E.).

# THE GLACIER METAL COMPANY LIMITED, KILMARNOCK

## CHIEF WORK STUDY ENGINEER

- We are an expanding and vigorous organisation operating in a market where high standards of quality and efficiency are demanded and we recognise the valuable contribution which Work Study can make to the achievement of these objectives.
- We seek a **CHIEF WORK STUDY ENGINEER** to develop further the activities of an established Work Study Department which include subjecting operating techniques to continual review, setting work standards, initiating control mechanisms, improving clerical routines and material handling procedures.
- We need an Engineering Graduate or someone similarly qualified who has had considerable practical workshop experience. He must have "fire in his belly" and other qualities which will enable him to make an effective impact on the factory. We would be particularly interested to hear from those who have either worked as Consultants or who have received considerable Work Study training from a reputable firm of Consultants.
- This is a senior appointment with a starting salary within the range £1,350 - £1,850. There are excellent opportunities for further advancement.
- The factory is a modern one situated close to Ayrshire's holiday resorts.
- Applications containing brief relevant details including present salary to:

**THE PERSONNEL MANAGER, THE GLACIER METAL COMPANY LIMITED, KILMARNOCK**

Management Consultants and Industrial Engineers, A. G. Hayek and Partners Ltd., have further vacancies in their consultancy organisation. Applicants must have extensive senior Work Study experience and be capable of conducting major investigations with policy guidance only. Qualified Engineers preferred. Opportunity of advancement to partnership status for men of good personality, eager to take responsibility, who put their career first. Residential appointment in Stoke-on-Trent with little travelling. Apply in confidence to the above, at Federation House, Stoke-on-Trent, giving fullest particulars of background and salary requirements.

### THE NELSON RESEARCH LABORATORIES OF THE ENGLISH ELECTRIC COMPANY LIMITED

●  
have vacancies for  
**ENGINEERS AND PHYSICISTS**

●  
To work on investigation into the **WEAR AND FRICTION** characteristics of rubbing surfaces on a fundamental basis. Research on various aspects of **SOLID STATE PHYSICS** including fundamental work on Magnetism and Semi-Conductor Materials. Previous experience in these fields is not necessary but a sound basic knowledge is essential.

●  
The Company offers an attractive superannuation scheme and the Laboratories are situated in pleasant countryside on the outskirts of Stafford. Please write giving full details of experience and qualifications to: Dept. C.P.S., Marconi House, 336 - 7 Strand, W.C.2, quoting reference IJ 913U.

**Development and Design Engineer.** This position arises in an old-established but up-to-date factory in South East Scotland, engaged in light engineering, and offers very considerable scope and prospects for an engineer with good technical qualifications and useful practical experience, preferably in the design and manufacture of press tooling for light ferrous and non-ferrous materials. A general knowledge of plastics would be advantageous. The essential personal requirements are an alert mind and initiative to work directly under the guidance of management towards the improvement of both the range and quality of the Company's products. Good pension facilities exist and assistance with housing could be arranged if necessary. A brief outline stating age, technical qualifications, position held and salaries earned, is requested in the first instance to: Box No. 1881, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.

### CHIEF ESTIMATOR

A division of a large group of Companies requires a Chief Estimator to organise and direct the activities of its Estimating Department.

The division is essentially a large light/medium machining organisation employing some 600 personnel, and has a bias to presswork although it includes a wide variety of other machining processes.

The appointment calls for a first-class organiser who has had a sound basic training and experience in production engineering with an acquired knowledge of associated accounting techniques. Experience in an Estimating Department is essential, including latterly a responsibility for sectional or departmental control and dealing with a high volume of enquiries.

Applicants must be members of The Institution of Production Engineers.

Applications giving details of qualifications, experience and current salary to: **Box 1882, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.**

## **Plessey**

# **Group Technical Executive**

### **FOR THE COMPONENTS GROUP**

The Components Group, which provides the telecommunications, radio and television industries with a wide range of metal and ceramic components, is creating a new post of Group Technical Executive, as part of its planned expansion programme. The Group carries out design, development and manufacture of components ranging from electro-mechanical and wound components to sub-miniature magnetic, piezo-electric and semi-conductor devices.

This is an outstanding opportunity for a first-class engineer or physicist, who has established his reputation in the fields of sub-miniature electronic componentry or applied solid-state physics, and is capable of making a practical contribution to the problems of a complex Group in a period of growth.

The Technical Executive will co-ordinate the technical function throughout the Group, advise on new techniques and projects and ensure that technical and product policy is maintained. He will be responsible directly to the Group Director.

This is a key Management post and will be remunerated accordingly. There are also Pension and Life Assurance benefits.

*Applications, which will be treated in strictest confidence, should be sent under Personal cover to: A. M. BROWN, Executive Director (Personnel),*

**THE PLESSEY COMPANY LIMITED, VICARAGE LANE, ILFORD, ESSEX**

**Time Study Engineer.** An experienced Time Study Engineer is required to supervise the setting of up-to-date standards in a medium sized factory situated in the North West of England, engaged in the production of special machinery. The company, which is a progressive one, enjoys a high reputation throughout the world and the position advertised provides excellent scope for ultimate appointment as head of the Department. Please give full details of age, training, experience to date, present salary, etc., to: Box 1879, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.

**Jig and Tool Designer/Engineer.** Challenging opportunity for capable man over 30 able to design and detail economically jigs, fixtures, tools, press tools, etc., around component drawings. Should be able to prepare machining layouts for clients and supervise manufacture of tools in small trade jobbing shop, rapidly expanding. Must be practical toolmaker with supervisory shop experience and administrative ability. Technical training to H.N.C. standard. Grad.I.Prod.E. preferred. Tunbridge Wells area. Starting salary according to experience, with very rapid prospects on showing results. Initially 44-hour week with overtime as required. Staff conditions. Fullest details and salary required to: Box No. 1872, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.

## **TIME AND MOTION STUDY ENGINEERS**

**required by F. PERKINS LIMITED, Peterborough.**

★ ★

Applicants, who should be aged between 25 - 30 years, should have O.N.C. or equivalent qualifications, together with minimum of 3 years' experience in Time Study, Speed and Effort Rating in the light engineering industry.

Preference will be given to applicants having previous experience of work study. Details in writing, including any apprenticeship or other types of specialised training, should be forwarded to the Personnel Manager.

**Estimator/Planning/Progress Engineer** required by small rapidly expanding contract firm in Kent, 35 miles London. At least O.N.C., preferably H.N.C. Production or similar. Must be able to price rapidly from customers' drawings and prepare efficient layouts and tooling for all types of machines, keep work flowing through shops and operate progress and job costing systems. Shop trained, practical keen man over 30 will find excellent opening for rapid advancement. Staff appointment, initially 44-hour week. Starting salary according to qualifications and experience with quick recognition of hard work and results. Write fullest details and salary required to: Box No. 1873, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.

## **WILMOT BREEDEN LIMITED**

●

**Applications are invited for the following Appointments:-**

### **PRODUCTION ENGINEER**

This is a new appointment suitable for an engineer age 35 - 45 having an outstanding knowledge of metal formation and tooling, and able to undertake project investigations to establish large scale production methods combined with full automation. Experience of automatic polishing and plating would be a considerable advantage.

### **CHIEF TIME STUDY ENGINEER**

To manage the Time Study Department, devise and apply group and individual incentive schemes, compile and use synthetics, etc. Candidates aged 30 - 45 should have successful experience in medium and light engineering processes involving presses up to 1,200 tons, multi and single spindle autos, polishing, plating, welding and assembling. A knowledge of the National Agreements affecting the engineering industry, and of work study techniques generally, is desirable.

The positions offer attractive salaries, prospects and pension schemes. Please write in confidence giving a concise outline of career and qualifications to the:

**Personnel Manager, Wilmot Breeden Limited,  
Amington Road, Birmingham, 25.**



## WORK STUDY

The British Oxygen Company Limited have a vacancy for a highly experienced Work Study Officer to be responsible for Work Study in their Central Operations Research and Work Study Department at Bridgewater House, St. James's, S.W.1.

The man appointed will be required to advise the Companies of the Group on the use and application of Work Study, especially Method Study, and to direct investigations in person when required. He will also organise Work Study training.

This is a senior position in the Company, and applicants must have appropriate qualities in leadership, training and experience.

For application forms and further information apply (in confidence) to:-

Group Personnel Officer (D.M.), THE B.O.C. Ltd.,  
Bridgewater House, Cleveland Row, St. James's,  
London, S.W.1.

## HAWKER SIDDELEY INDUSTRIAL DIVISION

### BRUSH ELECTRICAL ENGINEERING CO. LTD. LOUGHBOROUGH

#### This Company has a vacancy for a SENIOR METHODS ENGINEER

for machine shops engaged in the manufacture of medium/heavy electrical machinery. Applicants should be conversant with all types of machine tools and must be capable of suggesting changes of method to achieve cost reduction in machine shop operations. The working conditions are good and include a contributory pension scheme.

Applications, which will be treated in strict confidence, should give brief details of experience and qualifications and should be addressed to the

Employment Officer, Brush Electrical Engineering Company Limited, Loughborough, Leics., and should quote reference:- IE 5095

## CHIEF

### PRODUCTION ENGINEER

required for a large Company engaged in the manufacture of oxygen producing plant and chemical plant.

Qualified engineers of mature age and outlook are invited to make application. A knowledge of welding techniques and the fabrication of Pressure Vessels is necessary and previous experience should have included Jig and Tool Design, Process Planning, Work Study and Rate Fixing. The appointment offers an excellent commencing salary.

Assistance with housing may be made available, should it be necessary for the successful applicant to move home.

Local interviews can be arranged if required.

Applications giving full details should be sent to:-

The Personnel Manager (IAM/4), British Oxygen Engineering Ltd., Angel Road, Edmonton, London, N.18.

Works Manager wanted for engineering shop, East Coast Scotland, employing approximately 200 in shops. Pattern Shop, Foundry, Welding, Machine and Assembly Shops. Age 30 - 45 with executive experience and preferably with qualifications of Work Study and Shop Management. Please give as full particulars of experience as possible. Box No. 1877, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.

Production Engineer to report to Works Director required by long-established well-known public company engaged on light engineering work, situated 40 miles from London. Unusual opportunity for fully trained engineer with experience in work study, planning, shop loading and materials handling. Salary up to £2,000 according to experience. Reply in first instance, in confidence, giving full details of past experience to: Box No. 1884, I.Prod.E., 10 Chesterfield Street, London, W.1.

#### CHIEF PRODUCTION ENGINEER

Applications are invited for appointment as Chief Production Engineer to a medium/light engineering company in the London area.

The post requires a considerable experience of manufacturing processes and a specialist knowledge of all types of machine tools, particularly presswork. This experience must have included all aspects of Production Engineering, *inter alia* Tool Design, Planning, Estimating and Time Study.

Applicants should be currently occupying a senior post in a Company whose products have a large machining content, and should hold a professional qualification.

The appointment calls for the ability to exercise functional control over a decentralised Production Engineering Department, to develop new methods and maintain a constant review of existing methods, both personally and through departmental staffs.

Applications giving details of qualifications, experience and current salary should be addressed to: Box No. 1883, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.

## THE GLACIER METAL CO. LTD.

### CHIEF WORK STUDY ENGINEER

as Manager of an expanding team of Work Study Engineers in London. The job carries the responsibility for improving the production efficiency of the factory. Through his team, he will be expected to assist managers to review particular techniques and arrive at better ones. The emphasis is on methods improvement, not on time study.

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Applicants should have an engineering degree or equivalent qualification, preferably with apprenticeship. Experience in work study or managing engineering development work is essential. A person is sought who will fill this position and who also has the potential to grow beyond it to a higher level technical or management post in 3-5 years. Salary range: £1,350 - £1,750.

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**PERSONNEL MANAGER (Ref. 2090),  
THE GLACIER METAL COMPANY LIMITED,  
EALING ROAD, ALPERTON, WEMBLEY,  
MIDDLESEX.**

**Senior Production Engineer** required for engineering works in Glasgow, to take control of production engineering department. Fully experienced in manufacturing methods and ratefixing covering machining, fitting, fabricating and welding, as applied to light/medium engineering products. Must have held previous similar position. This is a senior staff appointment with good salary and prospects for advancement. Contributory pension scheme. Box No. 1885, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.

### METHODS ENGINEER

The Engineering Division make "Jones" Mobile Cranes and the Machine Shops handle various projects concerned with the machining of steel castings in the medium to heavy range.

★

With modern plant and equipment we are expanding production and need to increase the strength of our Production Engineering Department.

★

Applicants for the positions as Methods Engineer should have a sound engineering training and experience, together with a minimum academic standard equivalent to Ordinary National Certificate in Mechanical Engineering.

★

To those prepared to move to our district we offer assistance with housing; salaries are competitive and conditions progressive.

★

Write, in confidence, to: **The Personnel Director, K & L Steelfounders and Engineers Limited** (One of the 600 Group of Companies), **Letchworth** (The First Garden City), **Herts.**

## METROPOLITAN-VICKERS ELECTRICAL COMPANY LIMITED

*An A.E.I. Company*

**Trafford Park, Manchester, 17**

### ENGINEERS FOR THE MANUFACTURING ORGANISATION

A limited number of staff posts exist within the manufacturing organisation for men between 23-35, who have completed or are exempt from military service. Applicants must have either a university degree in electrical or mechanical engineering, with some practical experience, or have served some form of engineering apprenticeship and obtained Graduate membership of the I.E.E., I.Mech.E. or I.Prod.E., through Higher National Certificate or other qualification.

The following are examples of the posts available:-

#### Methods and Development Engineers

Co-ordination of the work of tool, process and production engineers. Collaboration with design and sales departments. Planning of shop floor layouts. Design of test equipment. Development of new methods. Responsibility for investigating and reducing costs.

#### Production Engineers

Planning manufacturing programmes for a number of contracts. Ensuring that materials are available and that stoppages in production are overcome.

Applicants must be prepared to work a 44 hour week. Opportunities for advancement to more senior posts are good and, for those who prove themselves suitable, there are long-term opportunities in other Company factories at home or abroad.

Please write for application form to the:-

**Personnel Manager, Metropolitan-Vickers  
Electrical Company Limited, Trafford Park,  
Manchester, 17. Mark envelope M.S.R.**

**Chief Inspector** required to administer the Company's policy and all branches of inspection in a light engineering factory. Applicants must be fully conversant with machine shop inspection relating to automatics, capstan lathes, drilling and milling machines, etc. The successful applicant would also be responsible for all components, sub-assembly and final assembly, incorporating presswork, welding, hard and soft soldering, spray, plating and polishing work, final assembly and packing. A sound engineering background and general production experience is desirable, also experience in organising and controlling an inspection staff of up to 50 persons. A good knowledge of quality control is an advantage. This is a pensionable staff appointment and carries excellent prospects for a person with drive, energy and enthusiasm. Salary range: £900-£1,100 per annum. Write in confidence, giving full details of training, positions held, etc. to: **The Director of Production, The Tilley Lamp Co. Ltd., Brent Works, Colindale Avenue, London, N.W.9.**

**Production or Industrial Engineer.** A large international company have a vacancy in their manufacturing plant at Belfast for a university graduate engineer, between the ages of 28-40 years with at least five years' industrial experience. This new post will include a very comprehensive range of duties normally associated with production and industrial engineering. Growth prospects are excellent. Box No. 1886, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.

## A PRODUCTION ENGINEER

will be appointed to a progressive family company owning two light general engineering works situated in the North Midlands and employing approximately 300.

The successful candidate, age range 32-38, must possess wide experience of production control, process planning and work study, and a clear appreciation of costing and estimating combined with the ability to appreciate customers' requirements.

He will have every opportunity of progress towards high responsibility. He must, therefore, essentially have the capacity to understand works personnel on a practical basis.

The salary has not yet been fixed but, initially, will be in the region of £1,000-£1,250, plus bonus, depending on age and experience. A contributory pension scheme is in operation and, if necessary, assistance with housing will be given.

Initial short applications on a confidential basis should be addressed to: (Ref. R198/59)

SENIOR STAFF CONSULTANTS LTD.,  
141 NEW BOND STREET,  
LONDON, W.1.

**Assistant Chief Planning Engineer.** An Engineering Group employing approximately 1,100 people wish to appoint an Assistant Chief Planning Engineer. Applicants should be experienced in modern machine shop methods and should have held a similar appointment for at least three years. A knowledge of machine tool practice extending from automatics to large horizontal borers is required. A degree in engineering is desirable but not essential. The successful applicant will be required to live in North-West England. The company does not provide accommodation but houses are available in pleasant urban surroundings. Commencing salary approximately £1,000-£1,200 per annum, depending on qualifications and experience. The Company operates a superannuation scheme. All applications will be treated confidentially and should be addressed to: Box No. 1880, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1. Copies of references should be enclosed.

## EDUCATIONAL APPOINTMENTS

**Brighton Technical College, Mechanical Engineering Dept. Lecturer or Assistant (Grade B) in Engineering Metallurgy** for degree and diploma courses, prepared to teach at least one other mechanical engineering subject, with Degree in Engineering or Metallurgy or corporate membership of appropriate professional institution. Salary scales (subject to revision from 1st October, 1959): **Lecturers** (men), £1,260 × £31 10s. Od. — £1,417 10s. Od.; **Assistants Grade B** (men), £682 10s. Od. × £26 5s. Od. — £1,076 5s. Od., plus graduate and training allowances if appropriate. Increments may be allowed in each scale for approved industrial, professional or research experience. Further particulars and application forms from: W. G. Stone, Director of Education, 54 Old Steine, Brighton, to be returned to: The Principal, Brighton Technical College, Brighton, 7, as soon as possible.

## Farnborough Technical College.

Applications are invited for the following posts which are now vacant: (1) **Assistant Lecturers, Grade B, in General Engineering**; (2) **Assistant Lecturer, Grade A, in Engineering**. Candidates will be required to assist in National Certificate courses in Mechanical and/or Electrical Engineering. Ability to assist in craft courses will be an additional qualification. Salaries in accordance with the Burnham Scale for Teachers in Technical Colleges: **Assistant, Grade A**, £520-£1,000 × £27 10s. Od.; **Assistants, Grade B**, £700-£1,150 × £27 10s. Od., with the usual allowances for training, qualifications and increments for approved industrial experience, e.g., £165 for a good Honours degree. Further particulars and application forms may be obtained from: The Principal, Farnborough Technical College, Boundary Road, Farnborough, Hants., to whom they should be returned within 14 days of the appearance of this advertisement.

## Braintree College of Further Education, Essex.

Required as soon as possible **Assistant Grade B for Workshop Technology and Practice** and ancillary subjects for Final City and Guilds Machine Shop Engineering Examination and O.N.C. in Mechanical Engineering. Ability to teach engineering science and mathematics at elementary level would be an advantage. Candidates should be Associate Members of The Institution of Production Engineers, or possess equivalent qualifications. Salary in accordance with the Burnham Further Education Report, 1956, within the range (men): £682 10s. Od. — £1,286 5s. Od. per annum, depending on training, qualifications and previous teaching or industrial experience. This salary will probably be increased from 1st October, 1959. Details and forms (stamped addressed foolscap envelope) from: The Clerk to the Governors, Mid-Essex Technical College, Market Road, Chelmsford.

## Royal Technical College, Salford.

Applications are invited for the post of **Senior Lecturer in Machine Tool Technology** in the Department of Mechanical Engineering in this College of Advanced Technology. Candidates should have an honours degree in engineering or applied science (or its equivalent) and should have had research or design experience connected with machine tools or with manufacturing processes. Teaching experience would be an advantage. The successful candidate will be responsible to the Head of Department for the development of teaching and research laboratories in this field. A new machine tool laboratory is at present being equipped for teaching and for the present research programme, but further considerable extensions are being planned. The existing facilities will, however, give ample opportunity for immediate development in this field. Laboratory assistance and research demonstratorships are available for research work in machine tools; there will be opportunities to participate in other post-graduate work. There is an excellent Metrology Laboratory in the Department. Salary will be in accordance with the Burnham Technical Scale for Teachers in Establishments of Further Education. This is at present under review, but the revised scale will probably be £1,550 × £50 — £1,750 per annum (men). Successful applicants may be placed at intermediate points in these scales in accordance with previous experience in an equivalent capacity and/or industrial experience. Further particulars and forms of application may be obtained from: The Registrar, Royal Technical College, Salford, 5, Lancs., to whom completed applications should be returned by 14th October, 1959.

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*Printed by*  
MAXWELL, LOVE & CO. LTD.,  
309 - 317 Borough High Street,  
London, S.E.1.

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